

US EPA ARCHIVE DOCUMENT



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September 13, 2013

Mr. Jeffrey Robinson, Permit Section Chief  
U.S. Environmental Protection Agency Region VI, (6PD-R)  
Fountain Place 12<sup>th</sup> Floor, Suite 1200  
1445 Ross Avenue  
Dallas TX 75202-2733

**Reference: Prevention of Significant Deterioration Greenhouse Gas Permit  
Application for a Combined Cycle Electricity Generating Unit at  
Austin Energy Sand Hill Energy Center**

Dear Mr. Robinson:

On behalf of the City of Austin dba Austin Energy (Austin Energy), TRC Environmental Corporation hereby submits the enclosed Application for a PSD Greenhouse Gas Permit to the U.S. Environmental Protection Agency (EPA).

Austin Energy is proposing to build-out the Sand Hill Energy Center (SHEC) located in Del Valle, Texas by adding a new pipeline natural gas (PNG) fired combustion turbine generator (CTG) and heat recovery steam generator (HRSG) with natural gas fired duct burners to the existing combined cycle electricity generating unit at SHEC. The new unit would share the existing 189 MW steam turbine generator (STG) with the combustion turbine and HRSG associated with existing combined cycle unit. The proposed new combustion turbine generator is an updated version of the same General Electric (GE) Model 7FA unit currently in operation as part of the combined cycle unit.

Because the SHEC facility is an existing major source of greenhouse gas (GHG) emissions and the project increases the facility GHG emissions by more than 75,000 tons per year on a carbon dioxide equivalent (CO<sub>2</sub>e) basis, the project is subject to prevention of significant deterioration (PSD) new source review program requirements for GHG emissions. The United States Environmental Protection Agency (EPA) is authorized under a Federal Implementation Plan (FIP) to issue PSD permits in Texas for GHG sources until Texas submits the required SIP revision for GHG permitting and it is approved by EPA.

Sources of GHG emissions for the proposed project include the combustion turbine and duct burner combustion emissions of carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>), the natural gas piping component leaks and other releases of natural gas (including CH<sub>4</sub>) and the electric circuit breaker sulfur hexafluoride (SF<sub>6</sub>) leak emissions.

September 12, 2013

Page 2 of 2

In a pre-application meeting on June 4, 2013, Lee Lewis and Ravi Joseph of Austin Energy and their TRC contractors (David Shotts, Elizabeth Stanko, Mike Robbins, and Gwen Eklund in person and Carla Adduci and Chris Arrington by phone) met with EPA Region 6 staff Melanie Magee, Brian Tomasovic, Alfred Dumauval, and Tina Arnold. During that meeting, the proposed project was discussed and we have made every effort to follow instructions and advice given to the application team by the EPA Region 6 Staff.

We look forward to working with you and the U.S. EPA Region 6 team. Should you have technical questions regarding this application, please contact Mr. Ravi Joseph, P.E. at Austin Energy via telephone at 512.322.6284 or email at [Ravi.Joseph@austinenergy.com](mailto:Ravi.Joseph@austinenergy.com).

Sincerely,

TRC Environmental Corporation

Gwen Eklund  
Project Manager

Attachments (Permit Application, Biological Assessment, Cultural Assessment)

cc: Mr. Ravi Joseph, P.E., The City of Austin dba Austin Energy  
Mr. Lee Lewis, P.E., The City of Austin dba Austin Energy  
Ms. Kathleen Garrett, The City of Austin dba Austin Energy  
Mr. Mike Wilson, P.E., Director, Air Permits Division, TCEQ  
Mr. Mike Robbins, TRC  
Ms. Elizabeth Stanko, TRC  
Mr. David Shotts, P.E., TRC

